YW

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,138	03/29/2001	Kiran Challapali	US 010121	5629

24737 7590 02/22/2005

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER	
WOZNIAK, JAMES S	

ART UNIT	PAPER NUMBER
2655	

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/821,138	CHALLAPALI, KIRAN	
	Examiner	Art Unit	
	James S. Wozniak	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In response to the office action from 7/16/2004, the applicant has submitted an amendment, filed 10/16/2004, arguing to traverse the art rejection based on the limitation regarding the generation of facial movements of an animated character according to entered text and emoticons *(Amendment, Page 7)*. Applicant's arguments have been fully considered, however the previous rejection is maintained due to the reasons listed below in the response to arguments.

Response to Arguments

2. The applicant's arguments have been fully considered but they are not persuasive for the following reasons:

- With respect to **Claims 1 and 9**, the applicant argues that neither Sutton et al *(U.S. Patent: 6,539,354)* nor Kurlander *(U.S. Patent: 6,232,966)* teaches the generation of the facial movements of an animated character according to entered text and emoticons *(Amendment, Page 7)*, however it is the combination of these references that are relied upon to provide the teachings of the aforementioned limitation. As was noted in the passage cited in the previous office action, Sutton teaches that "text is translated into a synthesized voice and *a visual synthetic*

speech animation" *(Col. 20, Lines 47-52)*, by a gradual transition to various character face model states such as those shown in Fig. 2. Thus, Sutton teaches the generation of facial movements based upon a text word input.

Sutton further teaches the capability of including emotions in character face animations as was noted in the previous office action *(Col. 20, Lines 12-31)* and provides further teaching that a facial emotion animation can be generated according to an indicator located in the entered text *(Col. 14, Lines 18-33)*. The teachings of Sutton are deficient in that they fail to explicitly recite the use of emoticons for the generation of facial movement. As recited in the previous office action, Kurlander is relied upon to provide the teaching of the noted deficiency in Sutton. Kurlander recites that the generation of a face emotion can be enabled through the use of emoticons since they provide a shorthand or efficient means of indicating a facial action (Col. 9, Lines 52- Col. 10, Line 36). Thus, using the emoticons taught by Sutton for the indication of emotional animation information suggested by Kurlander provides a convenient shorthand means of initiating a character face animation. Thus, the rejection of Claims 1 and 9 is maintained.

- **Claims 2-4** are argued as further limiting their parent claims *(Amendment, Pages 7-8)*. Thus, since the rejection of claim 1 is maintained, Claims 2-4 also remain rejected.
- With respect to **Claims 5 and 10**, Sutton teaches the generation of a facial animation based upon an indicator located in a text, while Kurlander teaches the

association of emoticons with character face generation as noted above with respect to Claims 1 and 9.

- With respect to **Claims 6 and 11**, the applicant argues that Sutton fails to teach the association of a spoken word with a mouth movement, however as is noted by in Col. 20, Lines 19-21 and the previous office action *(Pages 4-5)*, Sutton teaches a character talking animation corresponding to a synthesized text input.
- In response to the arguments with regards to **Claims 7 and 12-20**, see the response to arguments for Claims 1 and 9.
- The applicant also argues that the rejection of Claims 1-12 and 17-20 under 35 U.S.C. 102(e) is improper *(Amendment, Page 6)*, however the examiner notes that these claims were rejected under 35 U.S.C. 103 (a) as is indicated by the 35 U.S.C. 103(a) heading and quotation and further evidenced by the claim rejections which contain all of the elements of a 35 U.S.C. rejection set forth on page 2 of the previous office action. While the 35 U.S.C. 103(a) rejection is an extension of 35 U.S.C. 102(e) (with respect to a rejection based upon filing date of a U.S. Patent), the notation of such a rejection on page 2 of the previous office action is a typographical error and based on the aforementioned evidence is rejected under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1-12 and 17-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutton et al *(U.S. Patent: 6,539,354)* in view of Kurlander *(U.S. Patent: 6,232,966)*.

Regarding claims 1 and 9, Sutton et al. disclose a visual system or program product stored on a recordable medium (computer with storage), which when executed provides a visual speech system, comprising (Fig 1, Title): A text-to-animation system for generating a displayable animated face image that can reproduce facial movements corresponding to the received word strings and the received emoticon strings (Col 20, Lines 47 - 52, Fig 10).

Sutton do not explicitly disclose a data import system for receiving text data that includes word strings and emoticon strings. Sutton's application includes an audio and text based input where users can also select the desired emotion parameter of the display character (Col 20, Lines 12-31) however, Sutton fails to explicitly define the claimed emoticon parameter for controlling the animation. However, Kurlander discloses a data import system for receiving text data that includes a list of emoticons (claimed emoticon strings) as shorthand means for text strings entered by users (CoI 9, Lines 52 - Col 10, Line 36). Emoticons provides a shorthand or efficient means for conveying an action within the text for the control of animated characters.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify Sutton et al. with the use of emoticons as a shorthand means for generating emotional expressions as taught by Kurlander since it is a more efficient means for controlling animated characters through text.

Regarding claim 2, Sutton et al. disclose a visual system/program further comprising a keyboard for typing in text data (CoI 20, Line 56).

Regarding claim 3, Sutton et al. disclose a visual system/program further comprising a text-to-audio system that can generate an audio speech broadcast corresponding the received word strings (Col 20, Lines 47 - 52).

Regarding claim 4, Sutton et al. disclose an audio-visual interface for displaying the displayable animated face image along with the audio speech broadcast (CoI 20, Line 47 - 56).

Regarding claims 5 & 10, Sutton et al. disclose that the text-to-animation system associates each emoticon string (emotion parameter) with an expressed emotion, and wherein the expressed emotion is reproduced on the animated face image with at least one facial movement (CoI 20, Lines 19 -23, Fig 10).

Regarding claims 6 & 11, Sutton et al. disclose that system or program wherein the text-to-animation system associates each word string with a spoken word, and wherein the spoken word is reproduced on the animated face image with at least one mouth movement (talking) (CoI 20, Lines 19 - 21).

Regarding claims 17 and 19, Sutton et al. disclose a method of performing visual speech on a system having a displayable animated face image (Title), comprising the steps of:

converting the word strings to audio speech; converting the word strings to mouth movements on the displayable animated face image, such that the mouth movements correspond with the audio speech; converting the emoticon strings to facial movements on the displayable animated face image, such that the facial movements correspond with expressed emotions associated with the entered emoticon strings (emotion parameter); and displaying the animated face image along with a broadcast of the audio speech (Col 20, Lines 14 - 52, Fig. 10).

Sutton et al. do not explicitly disclose entering text data into a keyboard, wherein the text data includes word strings and emoticon strings, the claimed emoticon parameter for controlling the animation. However, Kurlander teaches entering text data into a keyboard, wherein the text data includes a list of emoticons (claimed emoticon strings) as shorthand means for text strings entered by users (CoI 9, Lines 52 - Col 10, Line 36). Emoticons provides a shorthand or efficient means for conveying an action within the text for the control of animated characters.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify Sutton et al. with the use of emoticons as a shorthand means for generating emotional expressions as taught by Kurlander since it is a more efficient means for controlling animated characters through text.

Regarding claims 7, 12 & 18, Sutton et al. disclose a system or program wherein at least one facial movement is morphed with the at least one mouth movement. Sutton describes an algorithm for morphing facial movement with the movement of the mouth (lip-syncing) (Col 20, Lines 32 - 41, Fig. 10).

Regarding claim 20, Sutton et al. disclose a visual speech system (Title), comprising: a data import system for receiving text data that includes at least one emoticon string, wherein the at least one emoticon string is associated with a predetermined facial expression. Sutton describes auto- expressions from which the user can choose several predetermined facial and body movement to make the animation more lifelike (Col 20, Line 6, Col 20, Lines 19 - 21). In addition, Sutton describes a text-to-animation system for generating a displayable animated face image that can simulate at least one facial movement corresponding to the predetermined facial expression (CoI 20, Lines 46 - 53, Fig. 10).

5. **Claims 13- 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutton et al. (U.S. Patent 6539354) in view of Kurlander (U56232966) in further view of Grayson et al. (US Patent 5963217).

Regarding claim 13, the combination of Sutton et al and Kurlander do not explicitly disclose an online chat system/application (Web Chat system) having visual speech capabilities, comprising; a first networked client having: a first data import system for receiving text data that includes word strings and emoticon strings; and a data export system for sending the text data to a network; and a second networked client having: a second data import system for receiving the text data from the network; and a text- to-animation system for generating a displayable animated face image that reproduces facial movements corresponding to the received word strings and the received emoticon strings (emotion parameter) contained in the text data (CoI 20, 19 - 21 ; 43 - 59).

However, Grayson et al. disclose an electronic conferencing system (including a web chat systems) over a computer network where text is imported, exported and translated to audible speech at end-user or client computers (Title). Communicating by text over the network and translating to speech and animation at the end user computer is a very cost effective means of communicating since less bandwidth is utilized relative to video or audio data.

Therefore, it would have been obvious to one of ordinary skill at the time of invention to modify the modified Sutton et al. by using a network with client computers as taught by Grayson et al. since it would have increased the effectiveness of the web chat application to do text-to-animation processing on a local computer.

Regarding claim 14, the modified Sutton et al. disclose that the text-to-animation system associates each emoticon string (emotion parameter) with an expressed emotion, and wherein the expressed emotion is reproduced on the animated face image with at least one facial movement (Sutton: Col 20, Lines 19 -23, Fig 10).

Regarding claim 15, the modified Sutton et al. disclose that system or program wherein the text-to-animation system associates each word string with a spoken word, and wherein the spoken word is reproduced on the animated face image with at least one mouth movement (talking) (Sutton: Col 20, Lines 19 - 21).

Regarding claim 16, the modified Sutton et al. disclose a system or program wherein at least one facial movement is morphed with the at least one mouth movement. Sutton describes an

algorithm for morphing facial movement with the movement of the mouth (lip-syncing) Lines 32 - 41, Fig. 10). (Sutton: Col 20, Lines 32 - 41, Fig. 10).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Olveres et al *("Intelligent, Expressive Avatars," 1998)*- teaches a means for generating facial expressions for an animated avatar from text and emoticon input.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (703) 305-8669 and email is James.Wozniak@uspto.gov. The examiner can normally be reached on Mondays-Fridays, 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached at (703) 305-4827. The fax/phone number for the Technology Center 2600 where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology center receptionist whose telephone number is (703) 306-0377.

James S. Wozniak
1/21/2005

DAVID L. OMETZ
PRIMARY EXAMINER